TOWN OF KNIGHTDALE
Fire Department

967 Steeple Square Court ● Knightdale, NC 27545
Office (919) 217-2270 ● Fax (919) 217-2279

Request for Proposal
#511-21
Self-Contained Breathing Apparatus (SCBA)
Town of Knightdale
Fire Department

Proposal Responses: Due By: November 16, 2015 at 10 a.m. EST.

Submittals shall be delivered in a sealed package, container or envelope clearly marked on the outermost portion of the package:
Knightdale Fire Department
SCBA Proposal

Proposals will be received at:
Town of Knightdale
Purchasing Agent: Brent Quick
950 Steeple Square Ct.
Knightdale, North Carolina 27545

Direct Questions to:
Tim Guffey, Fire Chief
E-Mail: tim.guffey@knightdalenc.gov
Phone: 919-217-2270

ANTICIPATED SCHEDULE OF EVENTS

EVENT	DATE
Period of RFP	October 27, 2015 – November 16, 2015
Questions and Clarification	October 27, 2015 – November 15, 2015
Proposal Opening	November 16, 2015 11:00 a.m.
Location	Knightdale P.S. Training Room 967 Steeple Square Ct. Knightdale, NC 27545

Anticipated Award Date	December, 2015

TOWN OF KNIGHTDALE FIRE DEPARTMENT

REQUEST FOR PROPOSAL

SELF-CONTAINED BREATHING APPARATUS

1. INTRODUCTION

1.1. The Town of Knightdale Fire Department is seeking bids for purchase of self-contained breathing apparatus (SCBA) and related components. The SCBA and related components shall meet the minimum specifications listed below. Options are listed immediately following the minimum specifications. Proposals on the options are at the discretion of the vendor. All bids must conform to these specifications. The bid shall be for 21 SCBA's pack assembly with, 21- 4500 psi 45 minute cylinders and 21 face pieces with voice amplification capabilities, 21 spare- 4500 psi cylinders and 34 spare face pieces with voice amplification capabilities. The bid should also include 2 RIT Packs with 60 minute bottles.

2. BIDS

2.1. Bids must be submitted on the forms included in this document showing whether the bidder takes exception to the item. A complete set of the bid must be submitted in a sealed envelope to the Town of Knightdale Purchasing Agent: Brent Quick plainly marked Knightdale Fire Department SCBA Proposal. The signature page accompanying the bid shall be notarized. Bids submitted otherwise will not be acceptable.

2.2. The Town of Knightdale reserves the right to reject any or all bids, waive technicalities, and to be the sole judge of suitability of the equipment or services for its intended use and further specifically reserve the right to make the award in the best interests of the Town.
All equipment or services listed is intended for a particular use by the town in which it is to be utilized and must meet the requirements of that particular department. Other factors to be considered in awarding the bid will be price, quality, and time required to make delivery. Unless otherwise specified by the bidder, the town reserves the right to accept any item in the bid and to award items to one single provider.

2.3. Failure to respond to any requirements outlined in this RFB, or failure to enclose copies of the required documents, may disqualify the bid.

2.4. Since time is of the essence, the date of delivery as shown in the Bid may be taken into consideration in the award or in the cancellation of the award for breach of contract.

2.5. A contract will be awarded after an evaluation of all bids have been made, and in the interest of suitability to the Town's needs and/or economy, equipment, furnishings or service other than the cheapest in price may be selected.

2.6 As part of the bid process if awarded the manufacturer or vendor shall instruct and train and certify three Knightdale Firefighters to be able to make minor repairs on the SCBA packs and bottles.

3. EXCEPTIONS TO SPECIFICATIONS

3.1. These specifications are based upon design and performance criteria which have been researched and analyzed by the department. Therefore, major exceptions to these specifications will not be accepted.

3.2. To the right side of each section for a particular specification, the bidder shall state "YES", "NO" or "EXCEPTION" indicating the exact compliance with the specification.

3.3. All deviations and exceptions, no matter how slight, shall be clearly explained in writing with the bid proposal. All exceptions must list the section and fully describe the exception or alternative.

3.4. The Town of Knightdale Fire Department may choose to reject bids based on exceptions. Any exceptions that make the SCBA non-compliant with the National Fire Protection Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus will result in the bid being rejected.

4. WARRANTY INFORMATION

4.1. Vendor shall state specifically in the bid the manufacturer's warranty regarding parts and labor, and the duration of the warranty in years. If separate parts of the SCBA/cylinder/face piece have different warranties, this shall be specified in the bid. The vendor shall state specifically any and all regularly scheduled maintenance and requirements outlined by the manufacturer to maintain any and all warranties.

4.2. Additionally, the vendor shall also provide specific information regarding where said maintenance can and/or should be performed .

5. COST OF OWNERSHIP

5.1. The vendor and/or manufacturer's representative shall, to the best of their ability, provide documentation and/or information regarding their SCBA's projected "cost of ownership" over a five, ten and fifteen-year period.

6. CONTACT

6.1. Questions regarding the specifications should be directed to Fire Chief Tim Guffey tim.guffey@knightdalenc.gov 919-217-2270

7. MINIMUM SPECIFICATIONS OF THE SELF-CONTAINED BREATHING APPARATUS

7.1. It is the intent of these minimum specifications to describe certain equipment in sufficient detail to obtain competitive bids from qualified vendors for the furnishing and delivery of said equipment to be used by the Town of Knightdale Fire Department. All parts not specifically mentioned which are necessary to provide the described equipment shall be included in the proposal and shall conform in strength and quality or material and workmanship to what is usually provided for the trade in general. Any omissions of components in these specifications are inadvertent and should be included in the proposed SCBA.

	Meets Specifications		
	Yes	No	Exception
7.2. SCBA shall be approved by the National Institute for Occupational Safety and Health (NIOSH), under 42 CFR, Part 84 for chemical, biological, radiological, and nuclear protection (CBRN) with 45 minute service life and compliant with all requirements of the National Fire	O	O	O

Protection Association's 2013 Edition of NFPA-1981 Standard on Open-Circuit Self-Contained Breathing Apparatus.

7.3. Units equipped with integrated PASS device must meet requirements of NFPA 1982, 2013 edition.	O	O	O
7.4. Units equipped with accountability system must meet minimum requirements for FCC part 15 and part 90.	O	O	O

	Meets Specifications		
7.5. **Facepiece**	Yes	No	Exception
7.5.1. Facepiece shall have an open port to provide miniscule breathing resistance when regulator is not attached.	O	O	O
7.5.2. Facepiece shall provide means to display to user with visual indicators for Heads-Up Display (HUD).	O	O	O
7.5.3. Facepiece shall have icon for HUD system status indicators	O	O	O
7.5.4. Facepiece shall have regulator attachment that does not bear any weight on lens	O	O	O
7.5.5. Facepiece shall have effective field of view	O	O	O
7.5.6. Facepiece shall be available in three sizes in (small, medium, large)	O	O	O
7.5.7. Facepiece shall have a nose-cup comprised of silicone rubber and available in three sizes (small, medium, large)	O	O	O
7.5.8. Facepiece shall have two head harness options constructed of flame/heat resistant assembly:			
7.5.8.1. Kevlar 4-pt. adjustable Head Harness	O	O	O
7.5.8.2. Kevlar 5-pt. adjustable Head Harness	O	O	O
7.5.9. Facepiece shall have universal lens that can be used with all three facepiece sizes, shall be comprised of non-shatter type material and shall be field-replaceable	O	O	O
7.5.10. Lens shall be hard-coated on outside and anti-fog coated on inside	O	O	O
7.5.16. Facepiece shall be capable of water submersion for cleaning and disinfection	O	O	O
7.6 **Mask Mounted Regulator**			
7.6.1 The second stage regulator shall be a Push-to-Connect or twist lock style	O	O	O
7.6.2 Regulator shall be equipped with variable flow bypass	O	O	O

		Meets Specifications		
7.7	**Heads- Up Display (HUD)**	Yes	No	Exception
7.7.1.	Heads-Up Display (HUD) System shall be integrated with regulator, eliminating snag hazards and increase product durability	O	O	O
7.7.2.	HUD shall be powered from central power system	O	O	O
7.7.3.	HUD System shall eliminate cross-talk among firefighters	O	O	O
7.7.4.	HUD System shall be immune to radio frequency interference (RFI) and must function properly in close proximity to fire service hand held radio	O	O	O
7.7.5.	HUD System shall provide user with remaining cylinder air volume, in four increments through a series of colored LED's	O	O	O
7.7.6	HUD shall be field-removable and replaceable without use of special tools	O	O	O

		Meets Specifications		
7.8.	**Universal Air Connection (UAC)**	**Yes**	**No**	**Exception**
7.8.1.	System shall be capable of:			
	7.8.1.1. Refill within immediately dangerous to life or health (IDLH) atmospheres	O	O	O
	7.8.1.2. Transfilling between two SCBA wearers (connection allows for donation and receipt of air), providing emergency breathing system (EBS) while maintaining NIOSH approvals	O	O	O
	7.8.1.3 Quickly refilling (approximately one-minute duration) SCBA cylinder from mobile compressor, cascade system or RIT pack.	O	O	O
	7.8.1.4. Extending wearer's air supply *over* longer duration when remote cascade system or other compressed gas source is located within remote area	O	O	O
7.8.2.	Primary UAC shall be illuminated when supply pressure reaches Low Pressure Warning Alarm or can be configured to optional medium pressure warning alarm	O	O	O
7.8.3.	SCBA shall have secondary options for UAC to be mounted to the users front side	O	O	O
7.8.4.	SCBA shall have pouch equipped with a 3 foot quick-fill hose	O	O	O

	Meets Specifications		
7.9. **Pressure Reducer (First-Stage Regulator) with Primary Low Pressure Warning Device**	Yes	No	Exception
7.9.1. Pressure reducer shall incorporate downstream valve to ensure fail-safe design when in open position	O	O	O
7.9.2. Pressure reducer shall incorporate bell alarm mechanism	O	O	O
7.9.2.1. Bell alarm mechanism shall be an air-actuated, continuously ringing audible warning alarm, automatically operating when supply cylinder air pressure reaches approximately 33% of rated service life	O	O	O
7.9.2.2. Bell alarm mechanism shall cover multiple levels of frequencies to cover all hearing levels	O	O	O
7.9.2.3. Bell alarm mechanism shall be user-accessible while wearing SCBA	O	O	O
7.9.3. Pressure reducer reduces cylinder pressure to outlet pressure not to exceed 115 psi; outlet pressure must be adjustable	O	O	O
7.9.4. Pressure reducer shall have flow capacity of 700 liters per minute at full pressure	O	O	O
7.9.5. Pressure reducer shall have quick-connect cylinder connection	O	O	O
7.9.5.1. Quick-connect connection shall not be removable from cylinder while under pressure	O	O	O
7.9.6 Pressure reducer shall be sealed system that does not allow moisture to enter valve components	O	O	O
7.9.7. Pressure reducer shall not require special tools for disassembly	O	O	O

	Meets Specifications		
7.10. **Cylinders**	Yes	No	Exception
7.10.1. Cylinders with 4500 psig operating pressure must be available in 45- minute durations	O	O	O

7.10.2. Cylinder shall be constructed of deep-drawn, seamless aluminum liner that is fully wound over entire surface (except for thick neck area) with high-strength carbon fiber filaments impregnated with epoxy resin	O	O	O
7.10.3. Cylinder shall contain cylinder valve that shall incorporate pressure gauge to indicate cylinder pressure at all times. Pressure gauge face shall be luminescent. Hand wheel shall be placed at 90° angle from cylinder axis	O	O	O
7.10.4 Cylinder valve shall incorporate flow control insert to limit air flow over hand wheel's first half-rotation, minimizing propulsion thrust in event that cylinder is mishandled	O	O	O
7.10.5 Delivered cylinders more than 90 days past their Manufacture date will not be accepted	O	O	O

		Meets Specifications		
7.11.	**PASS Device**	**Yes**	**No**	**Exception**
7.11.1.	PASS device shall contain the power, control and battery modules	O	O	O
7.11.2.	Power module shall provide power to all electronic SCBA components from the battery module and act as central power system	O	O	O
7.11.3.	Power module shall act as central command center, distributing all information and data among electronic components	O	O	O
7.11.4.	Battery module shall be powered by alkaline batteries or lithium-ion rechargeable battery	O	O	O
7.11.5.	Power module shall be capable of illuminating UAC fitting when supply cylinder reaches 33% of rated service time	O	O	O
7.11.6.	PASS device shall use single line to connect power and Control module	O	O	O
7.11.7.	Control module shall have at least one reset button.	O	O	O
7.11.8	PASS device shall be equipped with buddy lights on Firefighters front and back and viewable from 360 degree view.	O	O	O
7.11.9	PASS device shall have colored buddy lights: green- Pressure above 50% and no alarms, yellow- pressure Between 34% and 50%, or red- below 34% and alarms are active.	O	O	O

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7.11.10. Power module shall be equipped with dual sound emitters sound emitters shall perform at minimum 100 in room temperature	O	O	O
7.11.11. PASS device shall be immune to radio frequency interference (RFI) and must function properly in close proximity of fire service hand-held radios.	O	O	O
7.11.12. PASS device shall employ gasket perimeter seal to provide highest protection level against water ingress while providing ability to upgrade or repair solutions.	O	O	O
7.11.13. The PASS device shall be capable of transmitting the following information to a remote base station receiving unit for accountability purposes	O	O	O
7.11.13.1. Firefighter name, truck or team assignment, cylinder pressure, service time remaining, PASS alarms (motion or manual) thermal alarms, battery status, radio connectivity and evacuation acknowledgement			

	Meets Specifications		
7.12. **Speaker Module**	**Yes**	**No**	**Exception**
7.12.1. Voice amplification system that removes inhalation breath noise	O	O	O
7.12.2. Speaker module shall provide at minimum, 70 dBa output	O	O	O
7.12.3. Speaker module shall be capable of passing NFPA heat and immersion leakage test.	O	O	O
either shoulder			
7.12.4. Speaker module shall easily be attached and removed without special tools	O	O	O
7.12.5. Speaker module shall have light to indicate that device is powered on	O	O	O
7.12.6 Speaker module shall have on/off button to allow user to manually power off as needed	O	O	O

	Meets Specifications		
7.13. **Carrier and Harness**	Yes	No	Exception
7.13.1. Shoulder harness shall have separate left and right pads for easier and less costly replacement	O	O	O
7.13.2. Shoulder harness shall have retro-reflective markings for better visibility within low light conditions	O	O	O
7.13.3. Shoulder harness shall have localized friction pads on shoulders to prevent slippage	O	O	O
7.13.4. Shoulder harness shall have an adjustable chest strap	O	O	O
7.13.5. Harness design shall have Kevlar webbing	O	O	O

7.13.6. Shoulder harness shall have accessory attachment point available for facepiece or pouch and can be moved from left to right shoulder strap or vice versa	O	O	O
7.13.7. Shoulder harness shall differentiate pad inside from pad outside by color.	O	O	O
7.13.8 Back plate cylinder band shall accommodate different size cylihders	O	O	O
7.13.9 Waist pad shall be of rigid construction to allow easy donning and support	O	O	O
7.13.10 Waist straps shall be double pull forward design	O	O	O
7.13.11 Harness design shall have a regulator keeper for storage that can be attached to waist strap	O	O	O
7.13.12 Regulator keeper shall allow regulator to be connected at	O	O	O
7.14 Regulator Keeper			
7.14.1 A low pressure airline hose assembly with a low pressure manifold that has a male and female quick disconnect and additional ports to allow the use of other SCBA manufactures low pressure fitting.	O	O	O

. 8. OPTIONS

8.1. The Town of Knightdale Fire Department has identified the following options that it will consider in addition to the minimum specifications. Additional options willl be considered given they fall within the available budget for the project.

	Meets Specifications		
8.2. OPTION A	Yes	No	Exception
8.2.1. Accountability system to include base station, tags, tag Reader/writer and software.	O	O	O

	Meets Specifications		
8.3 . OPTION B	Yes	No	Exception
8.3.1. Radio interface to Motorola portable radio to allow ease in communication.	O	O	O

	Meets Specifications		
8.4. OPTION C	Yes	No	Exception
8.4.1. Factory labeling of SCBA backpack/harness to identify Ownership and to include Knightdale Fire Department Inventory numbering system	O	O	O
8.4.2. Factory labeling of cylinders with a Knightdale Fire Department logo as an intergral part of the cylinder wrap Add on or glued on stickers are not acceptable .	O	O	O

	Meets Specifications		
8.5. OPTION D	Yes	No	Exception
8.5.1. Waist pad should be adjustable swiveling- standard - pad. attached to metal bracket that has three positions and automatically centers.	O	O	O

	Meets Specifications		
8.6. OPTION E	Yes	No	Exception
8.6.1. Emergency Air Supply System (RIT Pack). The air source shall consist of the following components:			
8.6.1.1. A carrying bag	O	O	O
8.6.1.2. External pressure gauge (optional)	O	O	O
8.6.1.3. An audible low-pressure alarm	O	O	O
8.6.1.4. A Universal Air Connection (UAC) high- pressure emergency airline that will function with any manufacturers NFPA 1981, 2002 compliant or newer self-contained breathing apparatus pressure manifold that has a male and female quick disconnect and additional ports to allow the use of other SCBA manufacturer's low-pressure fittings.	O	O	O
8.6.1.5. A low-pressure airline hose assembly with a low pressure Manifold that has a male and female quick disconnect And additional ports to allow the use of other SCBA's Manufactures low pressure fittings.	O	O	O
8.6.1.6. A RIT Style facepiece (optional)	O	O	O
8.6.1.7 A second stage pressure regulator	O	O	O

	Meets Specifications		
8.7. **OPTION** F	**Yes**	**No**	**Exception**
8.7.1. Telemetry available. Include cost of receiver and software. .	O	O	O

	Meets Specifications		
8.8. **OPTION G**	**Yes**	**No**	**Exception**
8.8.1. SCBA locator/ tracker	O	O	O

8.9 **OPTION H**	**Meets Specifications**		
	Yes	**No**	**Exception**
8.9.1 Rapid connection bottle- the ability to rapidly change the bottles.	**O**	**O**	**O**

8.10 **OPTION I**	**Meets Specifications**		
	Yes	**No**	**Exception**
8.10.1 TSI 8030 Portacount Pro Respirator Fit Tester	**O**	**O**	**O**

9. TRAINING AND FIT TESTING	Yes	No	Exception
9.1. The successful bidder shall provide, at no cost to the department, a technician level maintenance training class to three (3) members of the department at the manufacturer's location. A description of how this training will be performed shall be included in the proposal. Required tools for performing repairs, maintenance, and flow testing, and PC interface for PASS alarm (with software) shall be provided at this training.	O	O	O
9.2. The successful bidder will submit a plan for training all department personnel how to use the SCBA. The training program shall be in a Power Point or similar format.	O	O	O
9.3. The successful bidder shall provide initial fit testing for all members of the fire department. The fit testing shall comply with quantitative fit testing protocol per OSHA 1910.134 Appendix A Part I.c.3 (CNC (PortaCount) protocol). Fit testing shall include proper fit for each user with all sizes of face piece and nose cup being utilized to insure an adequate fit test is achieved. A computer generated report shall be provided to the department. The report shall include the information specified in OSHA 1910.134(m) records.	O	O	O

TOWN OF KNIGHTDALE FIRE DEPARTMENT

REQUEST FOR PROPOSAL ON

SELF-CONTAINED BREATHING APPARATUS

I,_____, as an authorized signer for my company hereby certify that the figures contained in this Bid Proposal are accurate and correct. I also have read and understand the specifications for the City of Concord, North Carolina, Self-Contained Breathing Apparatus and submit this Bid Proposal for consideration.

Siqned_____

Print Name_____.

Title_____

Company_____

Mailing Address_____

Phone_____

Date_____

NOTARY INFORMATION